



FALL 2024

THE COLD HARVESTER

NEWFOUNDLAND AQUACULTURE

**Cold Harvest 2024
Conference and
Tradeshow Details**

**Aquaculture
IS
Agriculture**

**Tracking
Invasive Tunicates
in NL**

*Member Profile:
Ocean Trout
Canada*

*Farming Our Oceans:
Proud. Innovative. Responsible.*

30th ANNUAL CONFERENCE & TRADE SHOW

Sheraton Hotel, St. John's, NL Canada

September 23rd – 25th, 2025

On behalf of the Newfoundland and Labrador aquaculture industry, we invite you to join us for our 30th Annual Cold Harvest Conference and Trade Show. Cold Harvest is a premier Canadian aquaculture conference, focused on promoting and developing the business of aquaculture for the prosperity of our sector and our communities. It brings farm management and service sector professionals together to build their knowledge and foster new business connections. The conference offers exciting and informative discussions related to aquaculture and its potential in Newfoundland and Labrador. With world-class keynote speakers and guests, and themed sessions related to aquaculture innovation, technology, science and service sector advancements, this event should not be missed.



Visit www.coldharvest.ca to learn more.



For enquiries, please contact: Roberta Collier at 709-538-3454 or E: roberta@naia.ca



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NEWFOUNDLAND AQUACULTURE INDUSTRY ASSOCIATION
29th Annual Conference & Trade Show
COLD HARVEST 2024 PROGRAM

Farming Our Oceans: Proud. Innovative. Responsible.

ST. JOHN'S, NEWFOUNDLAND AND LABRADOR, CANADA

Day 1: Tuesday, October 8, 2024					
19:00	to	21:00	Cold Harvest Opening Reception, Sheraton Hotel – Trade Show Areas		
Day 2: Wednesday, October 9, 2024					
09:00	to	09:45	Welcome and Greetings (Salon A)		
09:45	to	10:30	Keynote Address: Dr. George Chamberlain, President, The Center for Responsible Seafood (Salon A)		
10:30	to	11:00	NUTRITION BREAK (Trade Show Area)		
11:00	to	12:30	Dynamic Perspectives on Strengthening Your Social License - Interactive Panel Session Facilitator: Marilyn Butland, Butland Communications (Salon A)		
12:30	to	14:00	Lunch on Your Own - NAIA AGM for NAIA Members (Oppidan, Sheraton)		
14:00	to	15:20	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Human Resources and Community Development Chairperson: Amy Negrijn, Mowi Canada East (Avalon Battery) </td> <td style="width: 50%; vertical-align: top;"> Extensive Aquaculture - Shellfish and Kelps Chairpersons: Stephanie Synard-McInnis, FFA and Chris Hendry, DFO (Salon A) </td> </tr> </table>	Human Resources and Community Development Chairperson: Amy Negrijn, Mowi Canada East (Avalon Battery)	Extensive Aquaculture - Shellfish and Kelps Chairpersons: Stephanie Synard-McInnis, FFA and Chris Hendry, DFO (Salon A)
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15:20	to	15:50	NUTRITION BREAK (Trade Show Area)		
15:50	to	17:10	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Environmental Performance and Reporting Chairperson: Jonathan Kawaja, Mowi Canada East (Avalon Battery) </td> <td style="width: 50%; vertical-align: top;"> Extensive Aquaculture (Shellfish and Kelps) Chairpersons: Stephanie Synard-McInnis, FFA and Chris Hendry, DFO (Salon A) </td> </tr> </table>	Environmental Performance and Reporting Chairperson: Jonathan Kawaja, Mowi Canada East (Avalon Battery)	Extensive Aquaculture (Shellfish and Kelps) Chairpersons: Stephanie Synard-McInnis, FFA and Chris Hendry, DFO (Salon A)
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19:00	to	23:00	Cold Harvest Networking Event – Newfoundland Farmed Seafood Soirée - BellaVista, Torbay Road, St. John's Live Music by Masterless Men and The Brewmasters		
Day 3: Thursday, October 10, 2024					
08:30	to	9:50	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Service and Supply Showcase Chairperson: Darrell Green, Newfoundland Aquaculture Industry Association (Avalon Battery) </td> <td style="width: 50%; vertical-align: top;"> Climate Change and Adaptation for Farmed Seafood Chairperson: Cyr Couturier, Marine Institute of Memorial University (Salon A) </td> </tr> </table>	Service and Supply Showcase Chairperson: Darrell Green, Newfoundland Aquaculture Industry Association (Avalon Battery)	Climate Change and Adaptation for Farmed Seafood Chairperson: Cyr Couturier, Marine Institute of Memorial University (Salon A)
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09:50	to	10:20	NUTRITION BREAK (Trade Show Area)		
10:20	to	12:00	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Service and Supply Showcase & Presentations Chairperson: Darrell Green, Newfoundland Aquaculture Industry Association (Avalon Battery) </td> <td style="width: 50%; vertical-align: top;"> Innovation in Aqua Feeds and Feeding Chairperson: David Seeley, Skretting Canada East (Salon A) </td> </tr> </table>	Service and Supply Showcase & Presentations Chairperson: Darrell Green, Newfoundland Aquaculture Industry Association (Avalon Battery)	Innovation in Aqua Feeds and Feeding Chairperson: David Seeley, Skretting Canada East (Salon A)
Service and Supply Showcase & Presentations Chairperson: Darrell Green, Newfoundland Aquaculture Industry Association (Avalon Battery)	Innovation in Aqua Feeds and Feeding Chairperson: David Seeley, Skretting Canada East (Salon A)				
12:00	to	13:30	Lunch on Your Own		
13:30	to	15:00	Advancements in Finfish Aquaculture - Chairperson: Candice Way, LGL Limited (Salon A)		
15:10	to	15:40	NUTRITION BREAK (Trade Show Area)		
15:40	to	17:20	Advancements in Finfish Aquaculture - Chairperson: Candice Way, LGL Limited (Salon A)		
19:00	to	23:30	Closing Networking Event: O'Reilly's Famous Irish Newfoundland Pub, 13 George Street, St. John's, NL		

Please note that the presentation titles, speakers and times are subject to change.



Greetings from the Interim President

Jonathan Gagné

Challenges - and our responses to them - is what defines us

In my last message from this Summer's issue of the Cold Harvester I focused on the dedication and commitment that are foundational values in our sector. The dedication and commitment that started with the pioneers of the Newfoundland and Labrador aquaculture industry straight through to the hundreds of workers currently shepherding and advancing our wonderful industry along.

I believe that these values are fundamental to fostering the right attitude and character needed to meet challenges head on and succeed. The reason I highlighted these in the last issue was to make sure that we remember what was fought for in the past and what will be needed in the future to meet the challenges ahead.

The global aquaculture industry is in a challenging and unique position in 2024. Its necessity and need for growth have never been more evident when accounting for the ever-growing global demand for quality and sustainable seafood products. At the same time, the industry faces targeted objections from minority groups unwilling to participate in productive dialog, scientific exchange and/or good old fashioned problem solving. Rather, their righteous cause has become their primary objective, instead of endeavoring towards common sense approaches, and mutually beneficial solutions that could revolutionize our industry, protect our coastlines, revitalize our economies, and properly secure the wonderful, quality, sustainable seafood the world is demanding.

At this juncture, it is our responsibility to meet these challenges and respond with our steadfast belief in our industry. We must continue to encourage and challenge our governments of all types (municipal, provincial, and federal) to demonstrate our value and significance. Our successes will be their successes, and their successes will be beneficial to all of society.

However, to achieve such results, all governments must show the same faith, dedication, and commitment as the thousands of aquaculture workers across the nation do every single morning. Day after day, this must be our response and what defines our collective efforts before the naysayers.

We must encourage our youth to join in the challenge of rebuilding and revitalizing our rural communities across our shorelines from East to West. The incredible and diverse career opportunities offered within the aquaculture industry is at the forefront and leading these efforts in communities across the nation. Providing circumstances for growth, improved infrastructure, and investment to entire regions as well as opportunities for families to thrive and succeed during these challenging economical times.

As much as some would like to paint the aquaculture industry as a challenge and issue, my response is that a brief reflection of the facts and some common sense will tell you all you need to know. Aquaculture is part of the solutions to many modern-day challenges facing our society and is unquestionably worth the dedication and commitment that was poured into it by good people believing in a worthy industry. Today, we continue to follow in their footsteps whilst steadfastly meeting the challenges at hand and defining a better future for the industry.

On that note, I extend a warm welcome to all delegates, growers, sponsors, suppliers, and speakers attending our Cold Harvest Conference and Tradeshow in St John's this coming October 8th-10th, 2024. This will be a magnificent opportunity for all stakeholders to assemble, discuss and outline a bright future for aquaculture specifically in Newfoundland & Labrador and for all of Canada.

From your very dedicated interim president...



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Correction:

The summer 2024 edition of the Cold Harvester magazine included an article entitled: **Exploring Mitigation Measures for Vase Tunicate in Burgeo, Newfoundland** and unfortunately, the author's name wasn't included. It should be noted that the article was written by: Aiden Callfas, ACAP Humber Arm. You can view the full article here: https://naia.ca/application/files/1417/2234/0576/CH_Summer_2024_Web_Final.pdf





Message from Executive Director

Jamie Baker

After a hectic summer with lots happening on all fronts, we find ourselves finally at one of the most important times of year for the farm sector in Newfoundland and Labrador – conference time!

First and foremost, a warm welcome and a thank-you to all folks attending Cold Harvest 2024, October 8-10 at the Sheraton Newfoundland in St. John's.

This year's theme is "Farming Our Oceans: Proud. Innovative. Responsible." and really speaks to all the hard work that has gone into another year of advancement, growth and positive contributions to the communities where we work and the province in which we live.

The sector continues to demonstrate its commitment to sustainability through tireless contributions from folks working in the sector, which is critical given that Newfoundland and Labrador boasts the most growth potential of any region in Canada.

In 2023, the sector in NL brought nearly 20,000 tonnes of fresh, locally produced seafood to market (over 15,000 tonnes of salmonids and more than 4,000 tonnes of shellfish) worth nearly a quarter billion dollars just in wharf value. On farm and off farm we provided employment for about 2,000 Newfoundlanders and Labradorians. And this is still really just scratching the surface.

On the salmonid side, we are seeing tremendous advancements in green technology and farming practices that have practically eliminated escapes, reduced the need for treatment and continuously improved fish health.

On the shellfish side, we continue to put some of North America's only organically certified products to market, and the oyster sector continues to establish a strong foothold and reputation in markets across Canada and the US.

Alternative species that have been discussed for some time are starting to make great progress as well, including marine plants, wolffish, cleanerfish and others.

As positive as all that is, it's important to remember that continuing this positive track will require even more effort and dedication from folks in the sector going forward. Nothing good ever comes easy, but then that's a refrain that anyone in the farm world is entirely familiar with – and committed to achieving on a daily basis.

This year's conference will look at a lot of the hard work being done, the progress being made, future innovations that will continue to solidify the sector as the most environmentally sensible food production model on the planet. There will be many incredible presenters and speakers during our sessions and events to speak directly to some of this work.

But beyond that the conference will also take time to focus on what truly makes the sector so amazing – and that's the fresh, healthy and tasty seafood we produce. The quality products coming out of the oceans in NL will be directly featured and celebrated at an exciting new event during this year's conference, the Farmed Seafood Soirée.

Again, welcome to all attendees of Cold Harvest 2024, we look forward to a wonderful and very worthwhile event.



NAIA Summer Students Clue Up Another Year

NAIA was fortunate to receive funding to hire three students this summer: Janessa Davis, Kennedy Willcott and Alexandra Mackey. They were presented with many amazing opportunities and experiences and did an awesome job organizing NAIA's annual shoreline clean-ups.

In total, they organized and completed 4 shoreline clean-ups in the following communities: Hermitage-Sandyville, Harbour Breton, Conne River, and St. Alban's. A clean up was also scheduled in the community of Rencontre East but was postponed due to unforeseen circumstances. It was another very successful summer of clean ups, with 215 volunteers collecting 118 bags and 76 large pieces of debris.

"Completing these clean-ups is a very rewarding experience, as we get to do our part by helping remove marine debris from the beaches and encourage others to come out and do the same", said Kennedy Willcott, Project Manager.

In between clean-ups, they also toured a few aquaculture sites in the Coast of Bays. On July 3, they toured the Swangers Cove Hatchery. The tour was led by Hatchery Manager Jim

Murphy who provided them with an opportunity to visit the lab, witness hands-on sampling and visit the smolts ready to go to sea. They also toured the Hermitage Processing Plant on July 9 when Atlantic salmon were being processed.

On July 4, Janessa, who is heading into her second year of Biology at Memorial University was invited to shadow the staff of MAMKA in Conne River, NL. They travelled by boat to various sites in the Bay d'Espoir Region. They did ROV transects in Little River, checked green crab pots around the coast in the region, then went on shore in Conne River to check elver traps. The amazing staff of MAMKA provided her with hands-on experience in the field she is passionate about.

The students also visited Camp Connect on July 16 in Harbour Breton, NL. They read the books *The Farm on the Sea* and *Charley A Day in the Bay*. The kids were very attentive and interested in the stories that were read. Afterwards, they decorated marine themed cupcakes, followed by colouring sheets of salmon, salmon eggs and blue mussels. Many of the kids returned in the afternoon for the shoreline cleanup.

On July 14, Janessa had a second opportunity to shadow the staff of MAMKA in Conne River and staff of Aquatic Conservation Initiative from St. John's. They travelled to areas around the Bay d'Espoir region and collected American Eels from the Bay d'Espoir estuary. For the bigger eels, staff of Aquatic Conservation Initiative performed surgeries to insert acoustic tags into the eel's body cavity. For all the eels, everyone worked together to measure and insert Visual Identifier Elastomer (VIE) tags into each one. This experience provided Janessa with more hands-on experience in the field of Biology.

The following day, Janessa participated in the annual Eel Camp in Conne River, NL, with staff from MAMKA, Aquatic Conservation Initiative and Nova Scotia CPAWS. She enjoyed presentations on American eels and their importance to Indigenous communities. After, everyone went to the beach where they travelled by boat to participate in eel pot pulling. There were also demonstrations of eel spearing and everyone got to enjoy cooked eel.

"Working with NAIA has been an amazing opportunity for all of us to gain experience in the respective fields we plan to pursue. Special thanks to NAIA and most especially Roberta Collier, NAIA Community Outreach Coordinator for helping to provide us with these amazing opportunities", said Janessa.





Welcome New Associate Members!

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Marilyn Butland, Principal Consultant

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Website: www.butlandcom.com

Butland Communications is a strategic business communications consultancy focused on project planning, stakeholder relations and corporate communications. Principal consultant Marilyn Butland is a valued adviser with extensive experience in mining, aquaculture and wild fisheries, tourism, and indigenous relations in northern and rural environments. Her business acumen and sensitivity were honed over thirty years as an executive and partner in business, government and communications agencies. She holds a Bachelor of Commerce from Memorial University of Newfoundland and is a certified management consultant and accredited partnership broker.

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Email: clarkmarilyn@ptpimmigration.com

Website: www.ptpimmigration.com

Port to Port Immigration Services Inc. is a double ended international recruitment and immigration agency based in Halifax, but serving clients across the country. Our primary focus has been and always will be the seafood and aquaculture industry. Marilyn, who used to be the director of the Nova Scotia Fish Packers Association (now the Nova Scotia Seafood Alliance), lobbied on behalf of plant owners to improve the Temporary Foreign Worker Program to mitigate the effects of long-term labour shortages. She received her Regulated Canadian Immigration Consultant license and began Port to Port Immigration Services in 2018. Some of our services include: HR Assessments for Employers, LMIA Applications, Recruitment Services, Work Permit Applications, Travel Coordination, and Permanent Residency Applications.



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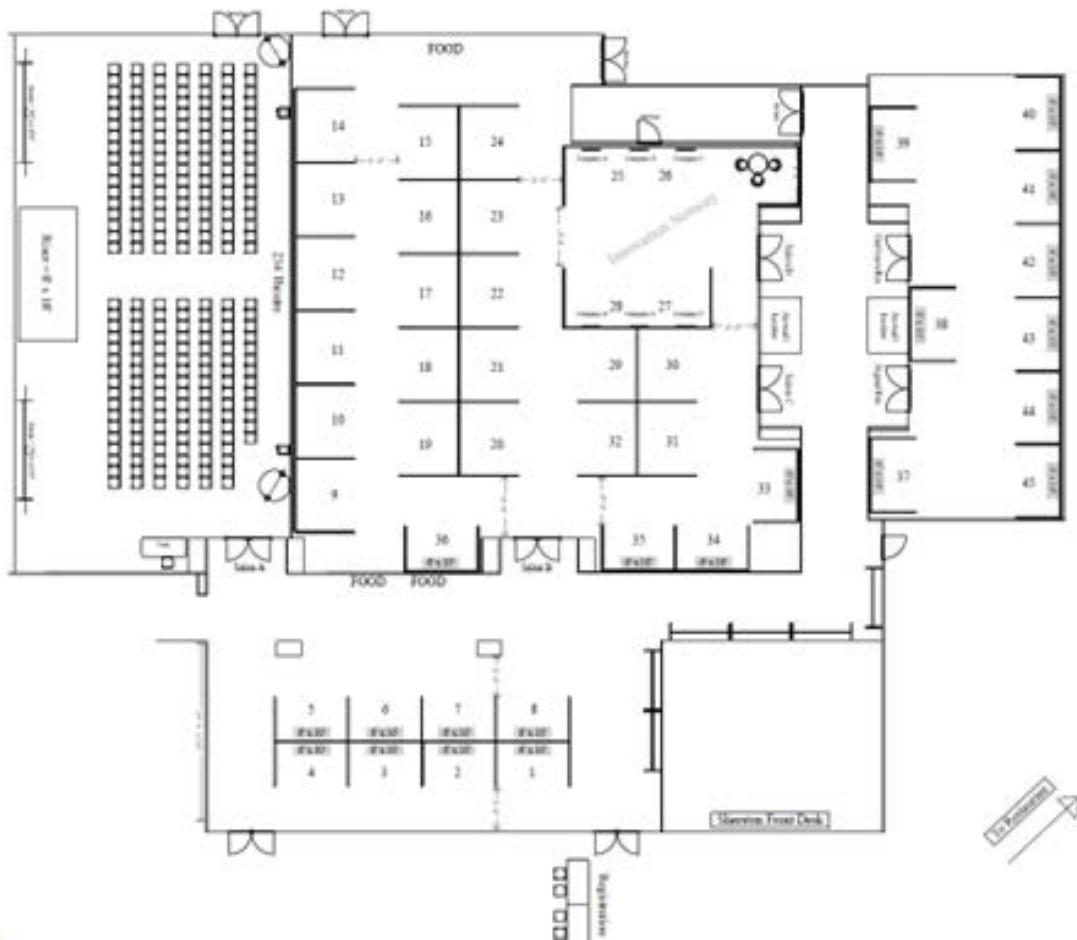
Ocean Trout Canada is an Atlantic Canada based, vertically integrated steelhead trout aquaculture company that focuses on producing premium steelhead products for the North American market. We combine the use of state of art RAS technologies for the production of juveniles in freshwater land-based systems as well as open net pens systems for the production of market fish in brackish & salt water.

We take pride in maintaining strong relationships with industry-leading processors and distributors, enabling us to uphold strict quality controls and traceability standards throughout our value chain. We currently operate four wholly owned subsidiaries: Nova Fish Farms Inc. (NL), Ocean Trout Farms Inc. (PEI & NS), St. Peters Hatchery (Cape Breton) and Ocean Trout NB (NB).

With a Head Office located in Bedford, NS, Ocean Trout Canada has transformed into one of Canada's leading providers of premium ocean-grown steelhead products. Farmed salmonids are noted for their sustainability, often cited as having a lower carbon footprint and minimal land and freshwater usage compared to other farmed animal proteins. This efficiency is further underscored by their superior feed conversion efficiencies and high edible yield, making them a leading choice in sustainable protein production.

Our Atlantic Canadian location ensures our product can be in the North American market, via truck transportation, within 48 hours. This allows us to swiftly adapt to customer demand, ensuring peak freshness.

COLD HARVEST TRADE SHOW FLOOR PLAN - SHERATON HOTEL



Booth	Exhibitor	Booth	Exhibitor
1	Gov. of NL - Immigration, Population & Skills	23	Oxyguard LLP
2	Fisheries & Oceans Canada - AIS	24	Gael Force Group
3	Merck Animal Health	25-28	Innovation Norway Delegation
4	Town of Harbour Breton	29-30	Enterprises Shippagan Ltd.
5	Deepchill Solutions Inc.	31	Optimar
6	Hoskin Scientific	32	Driveline Machine Shop
7	Jastram Technologies	33	Marine Institute of Memorial University of NL
8	Pro Dive Marine Services	34	SMIR AS
9-10	360 Marine Ltd.	35	Sandale Utility Products
11	Town of Grand Falls-Windsor	36	Wellfish Tech
12	Fisheries, Forestry and Agriculture	37	Port of Argentina
13-14	Mowi Canada East	38	AKVA Group North America
15	DSS Protection	39	Reeldata AI
16	Pennecon Hydraulic Systems	40	ScaleAQ North America
17	Business Development Bank of Canada	41	Canadian Pond.ca Products Ltd.
18	Deep Trekker Inc.	42	Kaeser Compressors Canada Inc.
19	Trinav Group	43	Planet Lighting
20	Flexahopper Plastics Ltd.	44	Skretting Canada Inc.
21	Oceanside Equipment NL Limited	45	Wolseley Waterworks
22	NLB Corp.		



Cold 2024 Harvest

NEWFOUNDLAND AQUACULTURE INDUSTRY ASSOCIATION

29th Annual Conference & Trade Show

Farming Our Oceans: Proud. Innovative. Responsible.

SHERATON HOTEL, ST. JOHN'S, NEWFOUNDLAND AND LABRADOR, CANADA

TUESDAY, OCTOBER 8TH - THURSDAY, OCTOBER 10TH

NAIA REGISTRATION DESK HOURS

Tuesday, Oct 8 from 8am – 8pm

Wednesday, Oct 9 from 8am – 5pm

Thursday, Oct 10 from 8am – 5pm

Email: roberta@naia.ca for more information.

TRADE SHOW EXHIBITS

All nutrition breaks will take place in the Trade Show area in Salon BCD and Garrison & Signal and the foyer area. Please show your support by visiting these areas. Exhibit spaces must be completely cleared by 5:00 pm on Thursday, October 10th.

NETWORKING EVENTS

OPENING RECEPTION AT THE SHERATON HOTEL

Tuesday, October 8th, from 7 – 9p.m.

Visit the exhibitors and enjoy delicious Newfoundland farmed seafood and appetizers prepared by the Sheraton Hotel Chef and staff.

NEWFOUNDLAND FARMED SEAFOOD SOIRÉE AT THE BELLA VISTA FEATURING MASTERLESS MEN & BREWMASTERS!

26 Torbay Road, St. John's NL

Wednesday, October 9, from 7 - 11p.m.

Join us for delicious Newfoundland farmed seafood and entertainment by Masterless Men and special guests Brewmasters. Complimentary transportation/buses will be available for pick up starting at 6:15 p.m. in the lobby of the Sheraton and return at 10:30 - 11:00 p.m. (On a first come first serve basis. Event tickets must be purchased in advance – available at registration)

NL KITCHEN PARTY AT O'REILLY'S

13 George Street, St. John's, NL

Thursday, October 10, from 7 – 10 p.m.

Join us on Thursday evening at the famous O'Reilly's Newfoundland Irish Pub for a Newfoundland Kitchen Party. Tickets include one beverage, appetizers, and live entertainment. (Tickets must be purchased in advance – available at registration)

NL Farmed Seafood Soirée

October 9, 2024; 7 - 11 pm



With entertainment by

The Masterless Men



and Special Guests:



THE BREW MASTERS

PLEASE SEE THE CONFERENCE INSERT FOR THE COLD HARVEST 2024 PROGRAM AND HIGHLIGHTS

NAIA ANNUAL GENERAL MEETING

The NAIA AGM for NAIA members will be held on Wednesday, October 9th at 12:30 p.m. at the Sheraton Hotel. Lunch will be provided for NAIA Members in attendance – Please RSVP at registration.

SPECIAL THANKS TO OUR COLD HARVEST PROGRAM COMMITTEE

Chris Hendry – Fisheries and Oceans Canada, Stephanie Synard McInnis – NL Department of Fisheries, Forestry and Agriculture, Laura Halfyard – Connaigre Fish Farms, Sheldon George – Ocean Trout Canada, Melissa Burke – Ocean Trout Canada,

Cyr Couturier - Marine Institute, Jonathan Gagné - Entreprises Shippagan Ltd., Candice Way – LGL Ltd., Aaron Bennett – Mowi, Amy Negrijn – Mowi, Jonathan Kawaja – Mowi, Marilyn Butland – Butland Communications, Stephen Backman – Skretting, David Seeley – Skretting, Jamie Baker, Darrell Green, Roberta Collier, and Jackie Richards – NAIA.

NAME TAGS

Please wear your name badges at all times as they will be required to access the trade-show and meeting spaces.



FEATURED SPEAKERS

KEYNOTE PROFILE

Wednesday, October 9 at 9:45 a.m. (SALON A)

DR. GEORGE CHAMBERLAIN, PRESIDENT OF THE CENTER FOR RESPONSIBLE SEAFOOD

Dr. Chamberlain started his aquaculture career in 1975 as a researcher, instructor, and Extension Aquaculture Specialist at Texas A&M University.

For the next ten years, he directed the aquaculture programs at Ralston Purina International and Monsanto. From 1999 to 2020, he founded and managed several shrimp breeding, nutrition, and farming companies ultimately known as Kona Bay with operations in Malaysia, Brunei, and Hawaii.

Concurrent with his commercial activities, Chamberlain served as a Board member and President of the World Aquaculture Society and later helped found both the Global Aquaculture Alliance (GSA) and The Center for Responsible Seafood (TCRS). He served for 25 years as President of GSA and now leads TCRS. One of the most ambitious and impactful projects of TCRS is a new Improver Program which leverages digital technology to help small holder farms begin their sustainability journey to certification.

PLENARY SPEAKER

Wednesday, October 9 at 11:00 a.m. (SALON A)

DR. BENTE TORSTENSEN, CEO, NOFIMA

Dr. Bente Torstensen is the CEO of Nofima, a leading Norwegian food research institute that conducts research and development for the aquaculture industry, the fishing industry and the food industry. She has worked at Nofima as Division Director for Aquaculture since August 2017. Prior to that, she worked at Marine Harvest (now Mowi) and Norway's National Institute of Nutrition and Seafood Research (NIFES). At NIFES she started as a Researcher before progressing to Senior Researcher, Research Manager and Research Director. She has a PhD in Nutritional Biology from the University of Bergen. She is also a graduate of Harvard Business School in Boston (Executive Education).

Torstensen is a member of the portfolio board of ocean industries under the Research Council of Norway, a board member of NCE Seafood Innovation Cluster, the Aquaculture Station in Tromsø and is the current Chair/President of the EAS (the European Aquaculture Society). Dr. Torstensen will also be speaking as part of the panel session titled "Dynamic Perspective on Strengthening Your Social License" on October 9th.



Government of Newfoundland and Labrador

Booth #1

Department of Immigration, Population Growth & Skills

www.gov.nl.ca/ipgs

Geoff Newman and Michael Robinson



The Department of Immigration, Population Growth and Skills (IPGS) has a mandate to ensure the province has skilled workers for our growing economy. This is achieved through a spectrum of programs and services in support of employers and workers assisting with immigration, training, wage subsidies, apprenticeship and connecting employers to workers. IPGS is committed to increasing the immigration target from 1,700 to 5,100 newcomers per year by 2026 to help fill current and future employment needs. Employers are encouraged to work with IPGS offices to help find workers and applicable employment and training programs to strengthen their labour force.

Fisheries and Oceans Canada



Fisheries and Oceans Canada

Pêches et Océans Canada

Booth #2

www.dfo-mpo.gc.ca/index-eng.html

macgregor.parent@dfo-mpo.gc.ca

MacGregor Parent and Emma Corbett

The Aquatic Invasive Species (AIS) National Core Program at Fisheries and Oceans Canada works to stop the spread of AIS through the four management pillars of prevention, early detection, response and control and management. This is done through consistent reporting, engagement, awareness, education, collaboration and building partnerships with all types of industries, groups and governments. Aquaculture is an industry that can be heavily impacted by the spread of AIS, but by raising awareness about the negative impacts of AIS through education and outreach, these impacts could be minimized. Visit the booth to learn how you can best prevent the spread of AIS in NL and what to do if you encounter an AIS.

Merck Animal Health

Booth #3

www.merck-animal-health.ca

Tyler.lettunich@merck.com

Tyler Lettunich



Ensuring Health, Welfare & Sustainability for Aquatic Species. Merck Animal Health is a research-driven company that develops, manufactures, and markets a broad range of veterinary medicines, services, and technologies. We offer one of the industry's most innovative portfolios, spanning products for the prevention, treatment, and monitoring of aquatic species.

Merck Animal Health helps aquaculture producers and conservationists cultivate and maintain healthy and sustainable aquatic ecosystems. Our industry-leading biopharmaceutical and technology solutions monitor for insight, optimize for precision, and benchmark for performance.

Town of Harbour Breton

Booth #4

www.harbourbreton.com

edo@harbourbreton.com

Tina Bungay and Loretta Abbott



The historic Town of Harbour Breton is located on the Connaigre Peninsula on Newfoundland's South Coast. Today, the traditional fishery & aquaculture is the mainstay of the town's economy. More recently though, new emerging fisheries and aquaculture along with tourism have helped diversify the economy and offer new opportunities for prospective investor. We are optimistic about the Town's future. We see opportunities for growth in our economy, a modern and well-equipped health facility, an efficient school system, modern recreation facilities, tourist attractions, and a municipal service infrastructure with all the modern amenities. We see ourselves as a proud, progressive community with a strong sense of history and culture. All of this makes us extremely optimistic as we confidently head into the future.

Deepchill Solutions Inc.

Booth #5

www.deepchill.com

kmorrison@deepchill.com

Kyle Morrison



Deepchill Solutions Inc. is the world leader in the field of slurry ice production, storage and distribution systems. Since 1982, Deepchill® has been deployed by seafood companies all around the world to optimize their operations by helping them harness the power of Deepchill® for superior cooling and preservation performance. Deepchill® is like no other ice technology. It comprises of tiny pearl-like micro-crystals generated in sea, or fresh water, delivered in a liquid slurry form to super chill and hold fish at its peak quality. In essence, Deepchill® keeps the fish colder and fresher for longer, enabling farmers and processors get the most out of their operation.

Hoskin Scientific

Booth #6

www.hoskin.ca

nlecki@hoskin.ca

Natalia Lecki



Our ENVIRONMENTAL DEPARTMENT provides solutions for monitoring and sampling water, soil, air and weather parameters in the environment. Our team of environmental sales representatives and diverse product range guarantee that you will find the right products for your application. Specific areas include water quality, water quantity, soil moisture, plant science, weather stations, air quality, hydrology, aquaculture, aquatic sampling, and oceanography. Whatever the area of specialty, Hoskin Scientific's environmental department can equip you to collect the data you need for your project whether through a purchase or rental.

Jastram Technologies

Booth #7

www.jastram.com

dpeters@jastram.com

Darren Peters and Bill Drake



Jastram Technologies, Ltd. (JTL) was established in 1983 in North Vancouver, as a Canadian distributor of high-quality marine equipment. Combining an extensive inventory, highly skilled technical sales staff, factory trained service people, and in house professional engineers with a customer driven focus has given JTL a distinct competitive advantage. Due to the complex nature of Jastram's product lines, our team is composed of technicians and engineers with extensive training by each manufacturer. This ideology is further strengthened by a willingness to work with naval architects, ship owners, shipyard engineers and service personnel at any stage of vessels life, from design to construction to in-service challenges.

Pro-Dive Marine Services

Booth #8

www.prodiv.ca

David Squires and Ron Pitcher



Pro-Dive Marine Services, serving Atlantic Canada since 1983, specializes in Diving and ROV services, supported by our in-house engineering services and small vessel fleet. We support all areas of underwater work for the marine sector whether its near-shore or offshore. Pro-Dive is a NL owned company based in St. John's that operates to both national and international standards in compliance with IMCA, ISO 9001, including in-water approvals by DNV, Lloyds Register, American Bureau of Shipping and Bureau Veritas. Pro-Dive Marine Services is audited and approved as members in NL Construction Safety Association (COR), ISNetwork and the Association of Diving Contractors International and is a member of Diver Certification Board of Canada, Energy NL, Marine Renewables Canada and Professional Engineers & Geoscientists of NL.

360 Marine Ltd.

Booths #9 & 10

makala@360marine.ca

Makala Butler & Fabian Manning



We are a locally owned and operated service provider for the marine industry within Atlantic Canada located in Harbour Breton, NL. At 360 Marine we offer a wide range of products and services to support the industry including vessels, barges, crewing, maintenance services, supplies, towing services, and more. We have an experienced team devoted to providing the best possible client satisfaction. With years of diverse experiences in different operations throughout the marine industry, our team is designed to find solutions to any task and make it a hassle-free process for our clients. We have experience in many marine service fields, including crew and supply transfer, mooring work, vessel charters, salvage and recovery operations, bottom survey operations, environmental and compliance work, marine infrastructure development and dredging, and ROV inspections. We strive to be the partner you can rely on to help your business grow and succeed, and we're dedicated to making that happen every step of the way.

Town of Grand Falls-Windsor

Booth #11

www.grandfallswindsor.com

ssingh@excitecorp.nf.ca

Stanley Singh



Grand Falls-Windsor is an important business, health, and social hub in Central Newfoundland. Located right along the Trans Canada Highway it is one of the largest towns in Newfoundland. The community is an important service hub for the aquaculture industry. Grand Falls-Windsor is serviced by two airports, Gander International Airport, one hour east and Deer Lake Regional Airport, two hours west. With a strategy for business attraction and retention, Grand Falls-Windsor encourages business partnerships and provides significant opportunity for commercial development with fully serviced industrial parks and ease of transportation.

Fisheries, Forestry and Agriculture

Booth #12

www.gov.nl.ca/ffa

Stephanie Synard McInnis and Gail Hoskins



The Provincial Government works with industry and stakeholders to achieve sustainable economic growth in all sectors for the benefit of the people of Newfoundland and Labrador. FFA's mandate includes development and growth of renewable aquatic resources for optimum sustainable economic benefit, while maintaining ecological integrity; conservation and protection of inland fish and wildlife; and regulation, compliance and enforcement of animal health and protection, food safety, aquaculture, agriculture, fish processing, inland fish and wildlife, and forestry.

Mowi Canada East Inc.

Booth #13-14

www.mowi.com

Jonathan Kawaja, Aaron Bennett, Amy Negrijn and Malcolm Gibson



Farmed Atlantic Salmon. Thanks to our world-leading, innovative and sustainable approach, we offer a wide selection of healthy, delicious and responsibly produced seafood.

DSS Protection

Booth #15

www.dssprotection.com

smash@dssprotection.com and cfurlong@dssprotection.com

Max Ash and Chad Furlong



DSS Protection is a Canadian-owned and operated group of companies who provides lifesaving, environmental, and asset protection solutions to Canada's commercial and recreational marine and aviation industries. DSS Protection has four sales and service stations across Canada, each with highly trained and certified technicians. Our team of technical and logistical professionals work together to ensure customers maintain operational readiness. Contact us to find out exactly what you need.

Pennecon Hydraulic Systems

Booth #16

www.pennecon.com

Eddy Knox and Brad MacRae



Pennecon services & maintenance prides itself on possessing a deep technical capability, backed by a breadth of experience, and the ability to solve our clients most complex problems.

Encompassing Pennecon technical services, Pennecon hydraulic systems, the panel shop, we are well-positioned to provide a comprehensive suite of technical services, specialized solutions and supports to serve its extensive client base. With over 180 skilled technicians deploying from multiple locations across Atlantic Canada, backed by our technical sales and support teams, and with deep relationships and distributorships with key technology and equipment providers, we have the capacity to respond to our clients every demand, 24/7/365.

Business Development Bank of Canada

Booth #17

www.bdc.ca

James Garland and Jillian Benson



As Canada's bank for entrepreneurs, BDC is a partner of choice for all entrepreneurs looking to access the financing and advice they need to build their businesses and tackle the big challenges of our time. Our investment arm, BDC Capital, offers a wide range of risk capital solutions to help grow the country's most innovative firms. For more information on BDC's products and services and to consult free tools, templates and articles, visit bdc.ca or join BDC on social media.

Deep Trekker Inc.

Booth #18

www.deeptrekker.com

Mackenzie Normandeau



Deep Trekker designs and manufactures underwater ROVs and surveillance cameras for regular inspection and site monitoring. Take control of your net inspection and ensure effective cleaning and monitoring using the new Photon ROV and DTPod. Our underwater robots make pen and net inspections part of your daily routine, detect wear and tear that can cause fish escapes, and monitor stock health and behaviour. All Deep Trekker units are battery operated and fully portable without the need for gas-powered generators or on-site power, ensuring no risk of contamination to the site environment.

Trinav Group

Booth 19

www.trinav.com

ghickman@trinav.com

Rick Young and Kerry Hann



The TriNav Group of Companies have been navigating the marine industry for over 30 Years. Located throughout the Eastern Seaboard, headquartered in St. John's, Newfoundland and Labrador, our clients are given the distinct advantage of cross-border marine services between New England and Atlantic Canada. Our group has over 30 Years of industry connections and experience providing a vast number of services to the marine industry ensuring professional and comprehensive support to all our clients worldwide.

Flexahopper Plastics Ltd.

Booth #20

www.flexahopper.com

sscotland@flexahopper.com

Adriana Mercader and Jen Patterson



From lobster, crab, salmon - You name it! We have a fishing container for you! For more than two decades, we have been committed to manufacturing the best products for the commercial fishing industry; our Insul-Tainers and single wall totes are the best-rated in the market! Come visit our booth, we have the right product for you!

Oceanside Equipment NL Limited

Booth #21

www.oceansideequipment.ca

vince@oceansideequipment.ca and

nicole@oceansideequipment.ca

Vincent Penton and Nicole Slade



The global distribution and manufacturing of rigging equipment, as well as the design, engineering, supply, installation and storage of certified mooring connector systems, equipment and accessories for the marine and offshore industries.

NLB Corp.

Booth #22

www.nlbcorp.com

Patrick.durrence@nlbusa.com and

Brandon.bascom@nlbusa.com

Patrick Durrence and Brandon Bascom



NLB Corporation leads the industry in manufacturing high-pressure water jetting equipment. Their reputation is built on product design integrity and quality manufacturing. With extensive expertise in high-pressure water jetting, NLB offers durable pumps demanded by various industries, including aquaculture. NLB's dedicated team goes beyond expectations, providing solutions for net cleaning operators. Their pump series delivers up to 275 bar (4,000 psi) pressure and 800 lpm (212 gpm) flow, compatible with leading head cleaning systems. NLB has received praise from net cleaning corporations for productivity, quality, and durability, with customers commending their solutions to operational obstacles.

Oxyguard LLP

Booth #23

www.oxyguard.com

cwi@oxyguard.com

Maja Wittrup and Carsten Wittrup



OxyGuard North America is a new branch of OxyGuard International, committed to focused services to our customers in North America. We are excited to be able to directly connect with our customers within their own time zones. The first oxygen probe leaving the OxyGuard facility introduced a new standard in aquaculture, and today OxyGuard continues to provide world-class equipment to the aquaculture industry and beyond. With a team of some of the world's best engineers, a creative work environment and an uncompromising vision to always deliver the best we can to our customers, we provide the sector with new solutions that keep up with current technological development, giving our customers the stability and competitiveness they need on the market.

Entreprises Shippagan Ltée

Booths #29-30

www.entship.ca

trevor@entship.ca and jonathan@entship.ca

Trevor Chiasson and Jonathan Gagné



Entreprises Shippagan Ltée. is an Atlantic Canadian GROUP of companies providing an array of commercial fishing and aquaculture supplies to fishermen and shellfish growers throughout Canada and the USA. Providing top quality items such as rope, buoys, bags, netting, chain, hardware, clothing, etc. Entreprises Shippagan Ltd is composed of 8 Vernon dEon Stores strategically placed in Nova Scotia and PEI. Other stores within the Maritimes includes a store in Newfoundland, Shippagan NB, and one in Point Sapin NB where we also have our Boat Building and Trap Manufacturing facilities as well as our latest acquisition with Pesca Royale Trawls located in Nova Scotia. Our head office and majority of warehouses are located in Shippagan NB where you will find an abundance of inventory to properly serve our valued customers.

**Anteo AS**

<https://en.anteo.no/om-oss>

✉ sverre@anteo.no and christine@anteo.no

👤 Sverre Marvik and Christine Nordal Sunde



Anteo is a company that develops decision support systems that will contribute to the sustainable development of the aquaculture industry. We deliver real-time solutions for monitoring and notification of activities that may be in conflict with the biosafety principle, and at the same time, the solutions will contribute to proposals for risk-reducing measures. Anteo's logistics tools provide access to vessels, sensors, data, and reports, which increase decision support and streamline information retrieval and sharing.

Aqua Robotics

<https://en.aquarobotics.no>

✉ knsn@aquarobotics.no

👤 Kjetil Storhaug Njærheim

AQUAROBOTICS

Aqua Robotics AS was started in 2016. Behind the company stands the Molaug family, which has solid experience in technology and business development in fish farming. Aqua Robotics AS's net cleaning technology includes HALO, a proven and practical technology used in Norway. HALO is installed with a separate cleaning unit for each cage. This has unique identification and location tracking and provides control over operation and driving patterns at any time.

Aquafarm Equipment

<https://aquafarm.no>

✉ jarle@aquafarm.no

👤 Jarle Lønning



A floating closed system is the most sustainable fish farming method so far, and we are one of the world's leading producers. We believe fish farming is a vital source of food, globally. We also believe that we need to do it sustainably, and that's what drove us to develop our method and our products. Years of research, testing, incremental progress and technological leaps have gone by, and our products are now ready for sale and lease. We're changing fish farming, forever.

Artec Aqua

<https://www.artec-aqua.no/en>

✉ knro@artec-aqua.com and mach@artec-aqua.com

👤 Knut Ivar Rødset and Matthew Chernin



A turnkey supplier for onshore aquaculture. From consulting and project design to contract negotiation and construction, we can look after the whole undertaking or individual parts of it. With complex projects, this gives you a clear overview and simplifies the process from decision-making to completion. We specialise in water treatment, and we guarantee excellent water quality irrespective of the technology used.

Lybe Scientific AS

www.lybescientific.com

✉ tonje@lybescientific.com

👤 Tonje Steigedal and Sten Even Erlandsen



Your lysis and bead expert! Lybe Scientific is based on patent pending technology originating from strong research groups within molecular medicine, nanotechnology and chemical engineering at The Norwegian University of Science and Technology (NTNU) located in Trondheim, Norway. Lybe's DNA/RNA purification technology is faster and more

precise than anything else on the market. Our technology is compatible with most common downstream applications (e.g. NGS, qRT-PCR, SNP Genotyping). Our Aquaculture product, aimed at pathogen detection, has shown superior sensitivity, quality, and efficiency. All products are manufactured in Norway, and we have 10M+ units sold in the market.

Meox Drift AS

<https://meox.no/kontakt-oss>

✉ kristian@meox.no

👤 Kristian K. Hjertvik



Meox is an expert on submersible tools for aquaculture. We are a high-tech company developing and producing customized products for the aquaculture industry. We develop all our products ourselves and have product lines in cleaning and fish collection. MEOX has developed its own unique patented washing system, which oscillates air into the water jet. This process is also called cavitation cleaning.

Salmotrace AS

www.salmotrace.com

✉ dag.haugse@salmotrace.com

👤 Dag Haugse

SalmoTrace provides the only solution that allows for 100% precise identification of farmed fish throughout the entire value chain. Based on a DNA tracer technology originating from DNV (Det Norske Veritas) and several years of development, SalmoTrace offers an accurate traceability for farmed seafood. This applies both for the purpose of identifying origin of farmed seafood that has escaped into the wild as well as for tracing the food product throughout the value chain.

Seafarming Systems

<https://seafarmingsystems.com/en/aquatraz-semi-closed-fish-cage>

✉ ars@seafarmingsystems.com

👤 Alf Reidar Sandstad

Seafarming Systems provide a quantum leap in cage technology that enables sustainable growth in fish farming. More than 10.000 tonnes salmon have since 2018 been produced in escape proof semi closed Aquatraz cages with good biological results. Aquatraz has lower production costs than conventional net pens, also when you take the investment into account.

Voatec AS

<https://voatec.no>

✉ stefan@voatec.no

👤 Stefan Paulsen



Voatec AS is an entrepreneurial company for the aquaculture industry and was established in 2020 with the aim of developing new and better solutions and equipment, especially those relating to the cage environment, biology and handling of fish. The patented 360FishSweep™ has been developed together with SalMar Farming and Leroy Aurora to fish out cleaner fish and sick/wounded fish in a highly efficient, predictable and gentle way. In less than a year, the system has fished out over 1 million lump fish and tens of thousands of salmon that have suffered from disease or wounds. The company is currently developing a new air spreader for feeding aiming for a higher area coverage than existing equipment in the industry.

Gael Force Group

Booth #24

www.gaelforcegroup.com

anthony.balmer@gaelforcegroup.com

Anthony Balmer



Gael Force Group is an established supply partner of robust and reliable equipment, technology, and services for the farming and catching of healthy, nutritious seafood. For 40 years, our drive to partner with our customers, whether it be the established fish farmer or the hard-working local fishing community, has enabled us to build lasting, trusted customer relationships. Our range of equipment includes feeding barges and systems, pens, nets, moorings, camera and lighting technology, and more.

Optimar

Booth #31

www.optimar.no

martinkarlsenhalifax@gmail.com

Martin Karlsen and Per Vidar Lange



Optimar is a global leader in automated fish processing solutions for the use onboard fishing vessels, on land basic facilities and in aquaculture. These solutions are installed as turnkey projects, either independently or in connection with third-party products. As a full-service provider, Optimar offers complementary software products and service. Optimar offers technology in robotization and automation and provides fish handling solutions and processing equipment for all species. As a system integrator we provide the time, talent and technology required to turn your vision into reality.

Driveline Machine Shop

Booth 32

www.drivelinemachineshop.ca

Dean Lee and Tom Hayden



Established in 1989 and based in Goulds, NL, Driveline Machine Shop is a reputable, family-owned business led by Dean Lee. Specializing in sales, service, and parts for high-quality marine engines and generators, we're authorized dealers for Cummins, Baudouin, Yanmar, John Deere, Kohler, and ONAN. Our efficient and reliable services meet the needs of Newfoundland's fishing and aquaculture industries by offering expert, customized solutions, including IMO 3. Providing quality work and customer loyalty, and the preferred provider for marine and land-based power solutions in Newfoundland & Labrador. Our Power Range: Engines (35HP - 1650HP), Generators (4kW to 1056kW)

Marine Institute of Memorial University of Newfoundland

Booth #33

www.mi.mun.ca

sandra.badcock@mi.mun.ca

Sandra Badcock



As a campus of Memorial University of Newfoundland, the Fisheries and Marine Institute (MI) is Canada's most comprehensive centre for education, training, applied research, and industrial support for the ocean industries. MI provides more than 30 industry-driven programs ranging from technical certificates to PhDs and has an extensive history with aquaculture programs, including a Graduate Diploma in Marine Studies (Aquaculture) and a Master of Marine Studies (Aquaculture). Through Community Based Education Delivery (CBED), MI offers short courses and micro credentials in aquaculture and can create customized training options to be delivered in the community, through online and in-person delivery options.

Smir AS

Booth #34

www.smir.no

oyvind@smir.no

Oyvind Nymark and Alan McFadyen



Fish welfare is our priority. We specialize in developing technologies that enhance fish health and optimize their environment. Whether its effectively combating or preventing lice infestations, implementing waterborne feeding systems, or utilizing submersible or semi-closed pen technology. Inspired by the blacksmiths problem-solving capability, our name reflects our passion for finding innovative solutions. We actively contribute to the green transition by providing trusted and reliable solutions to the aquaculture industry. Expect top-notch expertise, industry-leading technology, and a team dedicated to your success.

Sandale Utility Products

Booth #35

www.sandale.ca

lwhelan@emcoltd.com and Sfleming@emcoltd.com

Lucas Whelan and Steve Fleming



Sandale Utility Products has been a large supporter of the aquaculture industry in Canada, having completed projects both in saltwater and freshwater sectors. Sandale is committed to being a business for everything HDPE. This includes the fusion equipment and certified technical services/training to assist with the installation and fabrication of products on your jobsite. Our success is in the quality of our products and the knowledge and service of our people. Sandale Newfoundland has the capability to assist any of your piping system needs. Contact us today to work together on your next project.

Wellfish Tech

Booth 36

www.wellfishtech.com

mark.braceland@wellfishtech.com

Mark Braceland and Lesley Clark



WellFish Tech is focused on revolutionizing the way in which the health of aquaculture, wild stocks, and research animals are evaluated and managed using non-lethal blood assessment. The company combines production data, clinical chemistry, and AI tools to bring context to health monitoring and give insights which allow for data driven production and management decisions.

Port of Argentia

Booth #37

www.portofargentina.ca

r.greene@portofargentina.ca

Ray Greene and Chris Newhook



Port of Argentia has developed a strategic focus on key industry sectors including aquaculture, renewable energy and marine transportation. The Port features 600 metres docking facilities, 11 metre draft, and 1,000 hectares of industrial zoned uplands. Cooper Cove Marine Terminal Expansion Project at Argentia, scheduled for completion by 2027, will see capital infrastructure investment exceeding \$100M, including a concrete caisson dock with a minimum 13 metre draft featuring the latest innovations in decarbonization and port electrification.

AKVA Group North America

Booth #38

www.akvagroup.com

tarmstrong@akvagroup.com

Travis Armstrong and Brian Bosien



AKVA group is the world's largest supplier of solutions and services to aquaculture. Driven by passion, commitment and a deep understanding of the complexity in our industry, we can solve the most advanced challenges at sea and on land. We are present in all the world's markets with offices in 11 countries and employees from 39 nationalities.

Reeldata Ai

Booth #39

www.reeldata.ai

Kirti Shetty and Tim Trussell



ReelData is a Software as a Service (SaaS) provider, leveraging Artificial Intelligence (AI) and automation to improve productivity and profitability for land-based aquaculture producers, providing platforms to optimize production and monitor fish populations and their environment. ReelAppetite focuses on feeding efficiency, using AI to track feeding behaviour and optimize feed intake and waste. ReelWeight utilises a stereoscopic camera and AI to track individual fish, to collect average fish weight and weight distribution data, and ReelCount is an adaptable, portable, and easy-to-use solution, that, in combination with ReelWeight, allows for an accurate stock assessment and calculation of biomass on site. ReelData - Helping you improve economics and productivity everyday.

ScaleAQ North America

Booth #40

www.scaleaq.com

Conor Foster and Martin Søreide



ScaleAQ is a leading global technology partner that develops, supplies, and manufactures turn-key fish farms, roe-sorting machines, vaccination machines, vessels, service, and digital solutions for the aquaculture industry in more than 40 countries. We actively support our customers from roe until the fish is ready for slaughter. The company has approximately 900 skilled and competent employees with offices in Norway, Scotland, Poland, Iceland, Chile, Canada, Tasmania, and Vietnam. Our purpose is to shape a safe and sustainable aquaculture.

Canadian Pond.ca Products Ltd.

Booth #41

www.canadianpond.ca

Mario Paris and Josée Savage



CanadianPond.ca Products Ltd. (Bubble Tubing®) is an international manufacturer and supplier of upwelling, aeration and bubble curtain systems. CanadianPond.ca Products Ltd, offers highly efficient patented technology such as the SalmoAir® diffuser that allows fish farmers to be even more sustainable in this competitive market. Certified ISO 9001:2015, the company provides high quality equipment and offers an engineering service as well as technical support.

COLD HARVEST 2024 EXHIBITOR PROFILES

Kaeser Compressors Canada Inc.

Booth #42

<https://ca.kaeser.com>

marketing.canada@kaeser.com

René Moussette and Rick Neave

**KAESER
COMPRESSORS**

Kaeser Compressors has been providing compressed air systems solutions since 1919 throughout the world. Kaeser offers products, services and complete system solutions to supply compressed air to manufacturing and working processes. Our solutions combine products to produce and treat compressed air with comprehensive analysis and consultation. Our goal is to achieve optimal availability and an advantageous total cost of ownership for our customers. With our philosophy of "more compressed air for less energy", we have become a leading key global player in our industry.

Planet Lighting

Booth #43

www.planetlighting.com

Sean.Day@powerserve.ca

ben.iggulden@planetlighting.com

Sean Day and Ben Iggulden



Planet Lighting designs & manufactures aquaculture lighting systems trusted by the world's leading salmon producers. First deployed on Tasmanian sea farms in 2012, Focus lights were quickly adopted by renowned producers worldwide seeking higher efficiencies, increased yields, and lower maintenance. Powerserve Energy provides premium electrical services for aquaculture in Canada. Our partnership with Powerserve Energy ensures Planet Lighting customers in Canada receive the highest quality local service and support. Experts in marine and aquaculture electrical installations and systems, Powerserve brings over 40 years combined experience in large scale electrical services and installations to your farm.

Skretting Canada Inc.

Booth #44

www.skretting.com

David Seeley and Rodrigo Gonzalez



Skretting is a global leader in providing nutrition for the healthy and sustainable growth of shrimp and fish.

Wolseley Waterworks

Booth #45

www.wolseleyinc.ca

kirk.stokes@wolseleyinc.ca

Kirk Stokes and Chris Mayo



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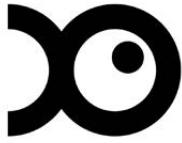
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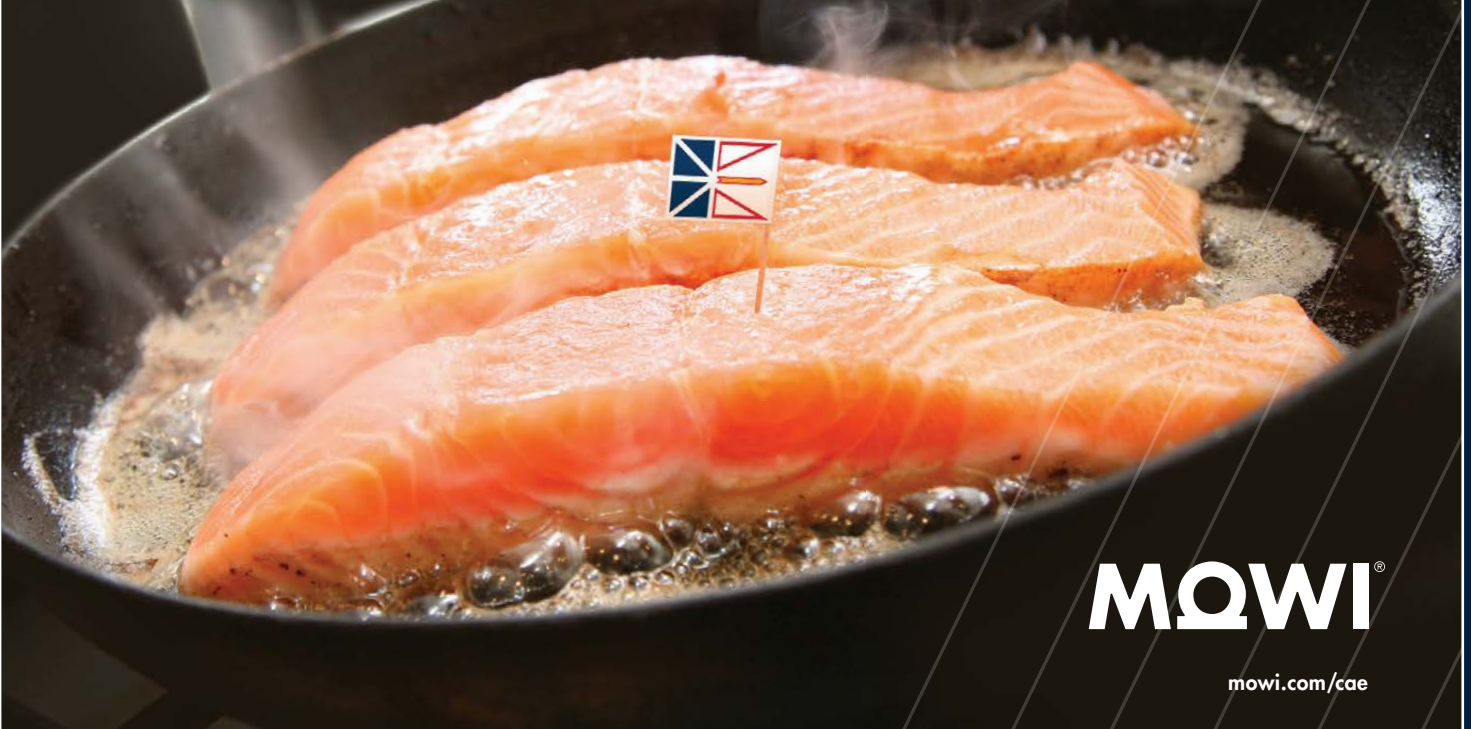
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Community Profile

Rencontre East



All across Newfoundland and Labrador the aquaculture industry contributes to local rural economies by providing employment for residents and supporting infrastructure investments and service sector companies. Our towns support our sustainable industry by providing a positive and supportive environment for aquaculture development. With this in mind, the Community Profile Column, in each edition of the Cold Harvester magazine, will celebrate a community where the aquaculture industry is active and is boosting rural economic activity.

P.O. Box 10, Rencontre East, NL A0H 2C0

townofrencontreeast@hotmail.com

Population: Approximately 100

Rencontre East is a quiet, stunningly beautiful community, only accessible by boat, located on the south coast of Newfoundland and Labrador. Their town slogan is: "Isolated & Lovin' it".

Mowi Canada East has an aquaculture site in the area called Little Burdock's Cove (LBC) that employs eight community residents. "Since 2011, Mowi has provided many opportunities for employment for the young and old which has helped generate income for both residents and the town as a whole," said Krystal Gillard, Town Clerk.

The aquaculture "family" continues to support the town in

many ways, including financial donations and various projects. Mowi has also aided the town council on numerous occasions by bringing in large equipment such as their excavator and dump truck which would be impossible without the use of their barge. This has allowed the town to keep up with the continuous infrastructure upgrades and general maintenance needed. When the community ferry was on refit and their transportation was limited, the town worked effortlessly with Mowi employees who didn't hesitate to deliver residents prescriptions, mail & grocery supplies.

"Aquaculture has been a life saver for our little town over the years. It has supplied permanent jobs for residents, making it possible to work and live in their home community and financially support their families," said Deputy Mayor Margaret "Peg" Caines.

naia Shoreline Clean Ups – That’s A Wrap!

Marine debris is any solid material that is disposed of or abandoned in the marine environment. This often includes items like plastic, fish nets, and other waste products. Marine litter is a significant environmental issue that requires global attention and action to mitigate its impacts on our oceans.

NAIA has been partnering with aquaculture companies and municipalities to organize shoreline clean ups in the Coast of Bays region for almost twenty years. This summer, NAIA students Kennedy, Alexandra and Janessa were very busy organizing the clean ups, seeking volunteers and sponsors for supplies, prizes, snacks and refreshments. Overall, four communities partnered with us: Conne River, Hermitage-Sandyville, St. Alban’s and Harbour Breton. Other communities also organized their own clean up events which was great!

Following each clean up, each group completes a debris sheet for the area that they cleaned and once they are all tallied, it’s compared to the debris collected in previous years. This years’ statistics show that the debris collected in each community has decreased which is awesome!

- The Hermitage shoreline clean up took place on July 9th, with 15 volunteers who together collected 16 bags and 6 large pieces of debris. Special thanks to Cooke Aquaculture for hosting the event and for providing the lunch!
- The Harbour Breton shoreline clean up took place on July 16th. We saw the largest attendance ever with 60 participants, who collected 29 bags and 16 large pieces of debris. Special thanks to Tay Aus Diving for sponsoring lunch! Due

to the high number of volunteers, we were able to clean all the beaches and even added other areas.

- The Conne River shoreline cleanup took place on July 31st. We had an excellent turn out with 93 volunteers of all ages. Following the clean up, Cyrus Lambert, Lands and Environment Manager with Miawpukek Band Council and staff provided prizes followed by hamburgers, hot-dogs and refreshments. NAIA also provided delicious NL farmed blue mussels provided by Norlantic Processors Ltd. Overall, there was 25 full bags of debris, and 12 large pieces of debris collected.
- The St. Alban’s shoreline clean up took place on August 7th and we had another great turn out with 47 people. Overall, 48 full bags and 42 large pieces of debris were collected. Special thanks to Mowi for sponsoring the lunch and to Cooke Aquaculture for allowing us to borrow their barbecue.

Special thanks to all our partners, sponsors and volunteers of the clean ups: Town of St. Alban’s, Town of Hermitage – Sandyville, Town of Harbour Breton, Miawpukek First Nations, Cooke Aquaculture, Cold Ocean Salmon, Hermitage Processing Inc., Mowi, Tay Aus Diving, MAMKA, Harbour Breton Youth Centre, Harbour Breton Youth Ventures, Harbour Breton Recreation, Harbour Yes, SimCorp Marine, Barry Group, Newfoundland and Labrador Hydro, Fisheries, Forestry and Agriculture, Government of NL, St. Alban’s Lions Club, Swanger Cove Hatchery, Bay d’Espoir CYN, GMG, and local residents.





Tracking the Spread of Invasive Vase Tunicate on the South Coast of Newfoundland

By: Philip S. Sargent, Ashley Bungay, and Cynthia H. McKenzie, Fisheries and Oceans Canada

Tunicates are a group of aquatic animals that, like clams and mussels, feed by filtering microscopic plants and animals out of the water that they inhale and exhale through their siphons. However, unlike clams and mussels that are protected by an outer shell, tunicates are protected by an outer covering called a tunic that in some species may be thin and translucent, while in others it may be thick and leathery.

Vase Tunicate (*Ciona intestinalis*) is an invasive species that has a high impact on the marine environment and the economy of several industries. It has an elongate, translucent body (often yellow or orange in colour) and can grow up to 15 cm long (see Figure

1 inset A) that is mostly water, and as such, adds considerable weight to any structure or gear on which it grows. It grows on most hard surfaces including manmade structures like wharves, floating docks, boat hulls, mussel lines, finfish cage nets and rope mooring lines, but also on natural substrates like kelp and rocks. Once established in an area this species often grows in very dense groups covering almost the entire surface (see Figure 1).

Vase tunicate is believed to have originated from the northeast Atlantic and was first reported in three locations in southwestern Placentia Bay, Newfoundland and Labrador in 2012. Annual surveys for invasive species in

Newfoundland suggested vase tunicate had remained contained to that area of Placentia Bay following several mitigation and control measures, until 2016 when it was reported at one location in Fortune Bay. Since then, reports have been increasing westward along the south coast of the island and it was even detected on the west coast in St. George's Bay. Many of these reports have come from industry, local harbour authorities, and partners outside of the Department of Fisheries and Oceans (DFO). Reports of this species have been increasing since 2018 as it is rapidly colonizing the south coast of Newfoundland, especially Fortune Bay, where it now ranges from Rencontre



Figure 1. Vase tunicates growing on kelp and wharf structures. Inset A: close-up of an individual vase tunicate.

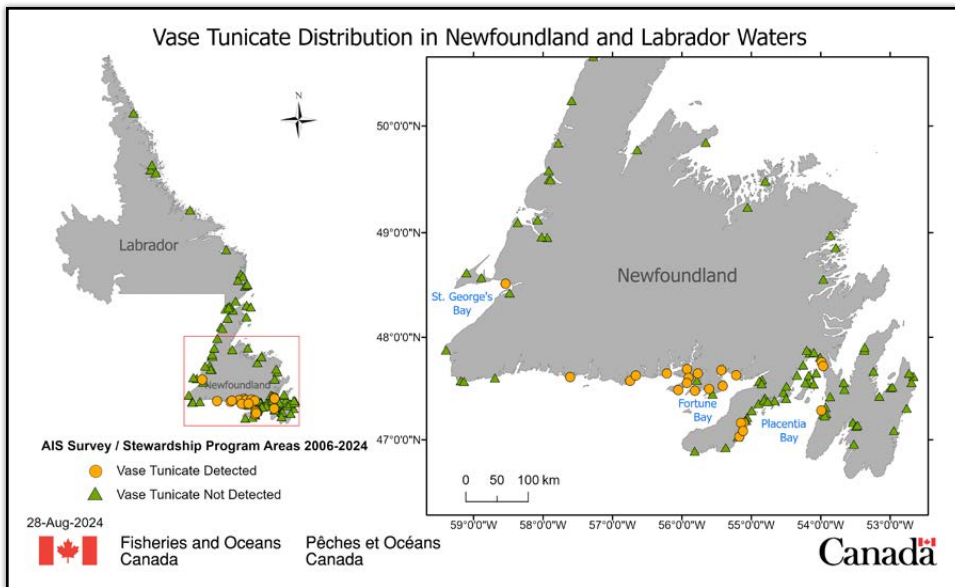


Figure 2. Current distribution map of vase tunicate in Newfoundland waters.

East to Burgeo (see Figure 2).

Vase tunicates can reproduce continuously for several months but their larvae settle out and attach to a substrate in less than a week, and as such, this species can only disperse a short distance on its own. However, it can travel long distances through the movement of infected vessels or gear. When it arrives in a new area, this species is able to quickly colonize an area outcompeting many native species which makes it a high impact biofouling organism. In the Maritimes and PEI, mussel farmers have found that farm sites colonized with vase tunicate have mussels with decreased size and condition and the cost of removing these tunicates has greatly impacted their businesses. Vase tunicates also grow on boat hulls which add extra weight and create extra drag on the vessel, increasing fuel and maintenance costs.

Preventing the spread of vase tunicate is very important, particularly for vessels and gear, which is the main method of spreading to a new area. Clean-Drain-Dry is a best practice when moving a vessel, fishing or aquaculture gear from one area, bay, or cove, to another. Clean and drain boats, trailer, and other equipment in the same area from which you have removed it. Do not move to another bay to clean your vessel.

Try to clean and drain any equipment on land, to prevent any runoff from re-entering the waterway, and clean with freshwater. Dry all equipment before moving it to a new location. Another way to protect gear and vessels and prevent the spread of vase tunicate is with the use of a copper based antifouling paint. The use of antifouling paints on wharves, docks, and boats will help deter vase tunicates from attaching to these

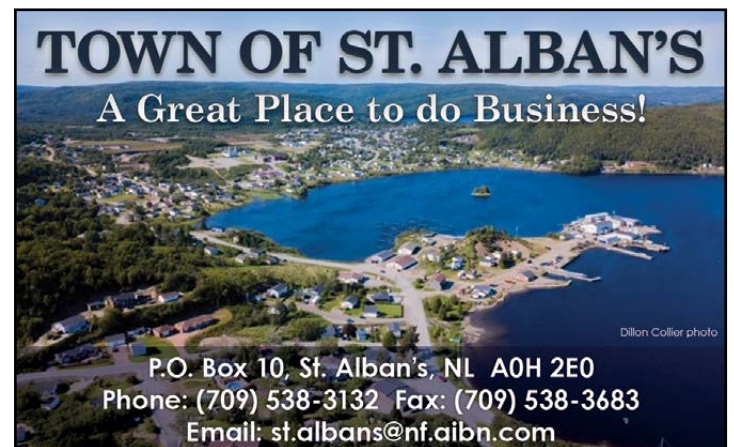
structures for a short period of time but is most effective if the antifouling coating is reapplied annually.

The Aquatic Invasive Species Program within DFO Science monitors for aquatic invasive species throughout Newfoundland and Labrador in collaboration with AIS Core (DFO), the the Provincial Department of Fisheries, Forestry and Agriculture, the Newfoundland Aquaculture Industry Association (NAIA), Harbour Authorities, Indigenous Groups, ACAP Humber Arm, and other community groups for early detection of these species and to determine the range of their distributions within the province. We use a variety

of survey methods to detect these species including scuba surveys, harbour and beach visual surveys, deployment of settlement plates for biofouling species, deployment of various traps and nets, and collecting water samples to detect environmental DNA (eDNA) from invasive species.

Later this fall our team is planning to visit the Coast of Bays to conduct more surveys for invasive species. We will be returning to local docks and wharves to collect our settlement plates, to see if vase tunicate has attached to them and collect water samples for eDNA. We will also be looking into vessel traffic patterns in the area, to determine where boats and gear may be regularly moving between bays and coves. With your help we can find new areas to survey and prevent further spread of vase tunicate along the south coast. As always if you suspect you are seeing vase tunicate or any other potential invasive species, please report it to the following:

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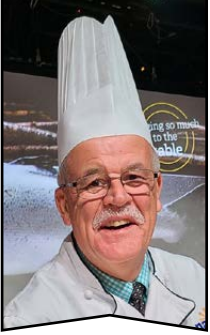
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Cooking with Chef Steve Watson

Grilled Maple Atlantic Salmon Steaks with Lemon Shallot Butter

Ingredients:

- 3 x 8 oz. Portions Atlantic Salmon Steaks
- 3 tbsp. Soy sauce
- 2 tbsp. Pure maple syrup
- Dash of Ground black pepper
- 1lb of Salted butter
- 2 Tsp of Lemon zest
- 2 Finely Chopped shallots
- 2 Tbsp. Chopped parsley

Directions for Salmon

Marinade:

Combine soy sauce, maple syrup, and black pepper in a shallow container with a tight-fitting lid. Add the Atlantic salmon portions, flesh-side down, into the container and seal. Marinate in the refrigerator for 30 minutes.

Lemon Shallot Butter

Whip together, the butter, lemon zest, shallots and chopped parsley and place in plastic film. Roll into a 1½ inch cylinder and refrigerate. Once its hardened, cut into ¼ inch slices.

Preheat an indoor grill on high heat and lightly oil the grate. Add the salmon steaks to the grill and close the lid. Allow to cook, basting once with the marinade, until the center bone separates from the flesh. Top with a slice of lemon shallot butter and serve.



If you would prefer to cook on an outside grill:

Preheat an outdoor grill on medium heat and lightly oil the grate.

Spray the Atlantic Salmon steaks with Pam to avoid sticking to grill. Lay the steaks on the grill and cook until the flesh flakes, turning once, 7 to 8 minutes. Enjoy!



Seafood Tip

Make whipped garlic butter by adding a minced clove of garlic and just a squeeze of lemon juice

Make whipped herb butter by adding just a squeeze of lemon juice and your favorite herbs: rosemary, chives, oregano.





DEEP TREKKER™

The Future of Remote Aquaculture Farm Inspections with ROV Technology

By: Chad Gillen, Deep Trekker

Aquaculture stands to be one of the most vital sources of sustainable food, driving the future of seafood. Ensuring the health of aquaculture farms through meticulous inspections and responsible operations is crucial for both seafood production and the preservation of aquatic ecosystems.

Deep Trekker is elevating their industry-leading aquaculture inspection ROVs with the introduction of BRIDGE, a

cutting-edge new software and hardware architecture that brings exciting benefits to farm operators.

The new BRIDGE.box hardware and BRIDGE.app serve as powerful tools for remote operation of their ROVs, providing aquaculture operators with the ability to control and monitor their equipment from an office or other off-site locations. The system also supports real-time data monitoring on multiple screens, support for virtually any controller, such as

joysticks, keyboards, or gamepads, and much more.

This framework enables seamless communication between the ROV and the operator, ensuring real-time data transfer and video feed access. In environments where direct human intervention is limited or hazardous, BRIDGE technology presents a valuable option that supports ongoing supervision of aquaculture farms.

Remote Monitoring and Inspections

One of the most significant benefits of BRIDGE-enabled ROVs is the ability to monitor fish cages and other infrastructure remotely. Through high-definition video feeds and integrated sensors, operators can assess critical factors such as water quality, feed distribution, and the physical condition of enclosures. This remote capability allows for continuous oversight, ensuring that any deviations from optimal conditions are promptly detected and addressed. The capacity to conduct regular inspections remotely not only mitigates the risks associated with on-site operations but also allows for a more consistent and comprehensive monitoring process. This proactive approach plays a critical role in maintaining the health and sustainability of aquaculture farms, preventing minor issues from escalating into serious problems.

Cost-Effective Farm Management


By reducing the need for on-site personnel and minimizing travel and diver expenses, aquaculture operations can allocate resources more efficiently. The ability to manage multiple sites remotely further amplifies these savings, allowing skilled operators to extend their reach and optimize farm operations without incurring additional costs. The streamlined management process made possible by BRIDGE technology also facilitates quicker decision-making and improves the responsiveness of aquaculture farms.

With real-time data at their fingertips, operators can make informed decisions that contribute to the overall success and sustainability of their operations.

Proactive Maintenance and Long-Term Asset Management

By conducting regular inspections and monitoring operations remotely, potential issues can be identified and addressed before they escalate, contributing to the longevity and reliability of farming assets. This improves productivity and sustainability in aquaculture practices, establishing effective resource management and maintenance of aquatic environments. BRIDGE technology dramatically improves the ability to perform regular inspections and maintenance checks on fish cages, nets, and other vital components. By identifying wear and tear or potential issues early, operators can schedule timely repairs or replacements, preventing costly disruptions to farm operations.

This proactive maintenance approach not only extends the lifespan of aquaculture assets but also contributes to more sustainable farming practices. Ensuring that all components are functioning correctly reduces the risk of environmental impact and supports the long-term viability of the operation.



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— Loretta Ward, Fish Harvester **Placentia Bay, Newfoundland**

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Couturier on Culture

Aquaculture IS Agriculture

A call to action, support farmers

Cyr Couturier is marine biologist, aquaculture scientist, and advocate for sustainable seafood production and farming. He has 35+ years of experience in applied research and development, training and education in aquaculture and fisheries (seaweed, finfish, shellfish). He is a Board and Executive member of several farming & development associations, including CAIA, CFA, CAHRC, HORIZON TNL, RDÉE Canada, AAC and is a past president of NAIA. He has worked in aquaculture and fisheries development in over 18 countries. The views expressed herein are his own. Contact: cyr.couturier@mi.mun.ca or follow on Twitter @aquacanada

The United Nations Food and Agriculture Organization (UNFAO 1988) defines aquaculture as farming; “Aquaculture is the farming of aquatic organisms, including fish, molluscs, crustaceans and aquatic plants. Farming implies some form of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated”. The definition is explicit in that it includes ownership of private property.

The definition of agriculture is even more compelling, from the Oxford dictionary “the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing animals to provide food, wool, and other products.” Although “soil” is mentioned in this definition, we all know that seafood farming is practiced over and in soil, whether that be in ocean, a lake, or in an estuary.

It is clear therefore that the practice of **Aquaculture IS Agriculture**. It is also clear that the majority of aquaculture and agriculture practices are for food production, given we have a growing world population, that increasingly demands healthy and nutritious foods to grow and

to develop.

We also know that fisheries, or the harvesting of a *common property resource*, by definition, are difficult to manage in a sustainable fashion, with many issues related to poaching, illegal, unreported

catches, discards, and so on. It’s a big and changing ocean out there, and quite difficult to keep it all under surveillance.

Aquaculture has been employed for millennia for food production, but increasingly in recent decades for regenerative
continued on page 38



purposes such as stock enhancement, wastewater treatment (pollution abatement), and for conservation of wild stocks.

So, why are we closing farms in Canada?

Anyone involved with fisheries or aquaculture will understand that these can be quite controversial. For fisheries, a *common property resource*, the licensing and monitoring policies are led by the federal government. The decisions in fisheries however have impacts on local communities that derive social, economic AND environmental benefits from such policies. They are meant to be evidence-based, or science-based, where fisheries management makes a recommendation to the Minister, based on all available data. Given aquaculture products are private property under the Constitution, both the provinces and the federal government have dual obligations for licensing and monitoring, and decision making. As with all other resource decisions, there is an obligation really, to **co-manage** fisheries.

When the federal government closes or opens a fishery, several impacts are felt at the provincial or territorial levels, including loss or gain of employment, investment, income taxes, expenditures by suppliers, in productivity, and by extension GDP. Similar issues arise of course when talking about aquaculture on land or at sea, given in fact there is joint responsibility for oversight of *private* property in a *common property* environment (the sea). It would make common sense, really, if the decisions on fisheries management were actually *co-managed* by both the federal and territorial governments, just like other natural resources, such as farming.

So, why is the Federal government now closing ocean-based farms in BC, and restricting the livelihoods of middle-class Canadians and abrogating Indigenous rights? In this context, one can point to the closure of salmon farms in British Columbia in 2021, with the resultant loss of about 1,600 direct and indirect jobs, and a half billion \$ in revenues from income and sales. This decision was made in spite of very strong evidence that salmon farms have negligible impacts on the wild fish. One can also point to the recent reopening of the commercial Northern cod fishery in NL, after 33 years of a moratorium, and this despite recommendations by science to the contrary. And the list goes on, and on.

It's evident now that politics is at play across the country, there are similar examples in many other provinces and territories, of resource access and closures, where decisions at

the federal level, are impacting local communities, in spite of data to the contrary. It is clearly poor decision making from the federal government.

It seems obvious that the joint management of natural resources, including seafood farming, is not a top priority for our federal government. Rather disagreements on fisheries and farming issues are increasingly becoming more volatile, and wreckless, in my opinion.

What does the future hold?

It's difficult to speculate, but the future for aquaculture in Canada, should be bright, with lots of opportunities to grow more food to feed Canadians and the World, with major social and economic benefits and very limited environmental footprint. Canadian seafood farmers are professionals, operating in harmony with nature, while facing the challenges imposed by climate change. Farmers need to be united in their messaging to all levels of government, and continue to work together for the benefit of all citizens and peoples of Canada. After all, **Aquaculture IS Agriculture**, and it is their social and economic responsibility to feed Canadians, and the World.



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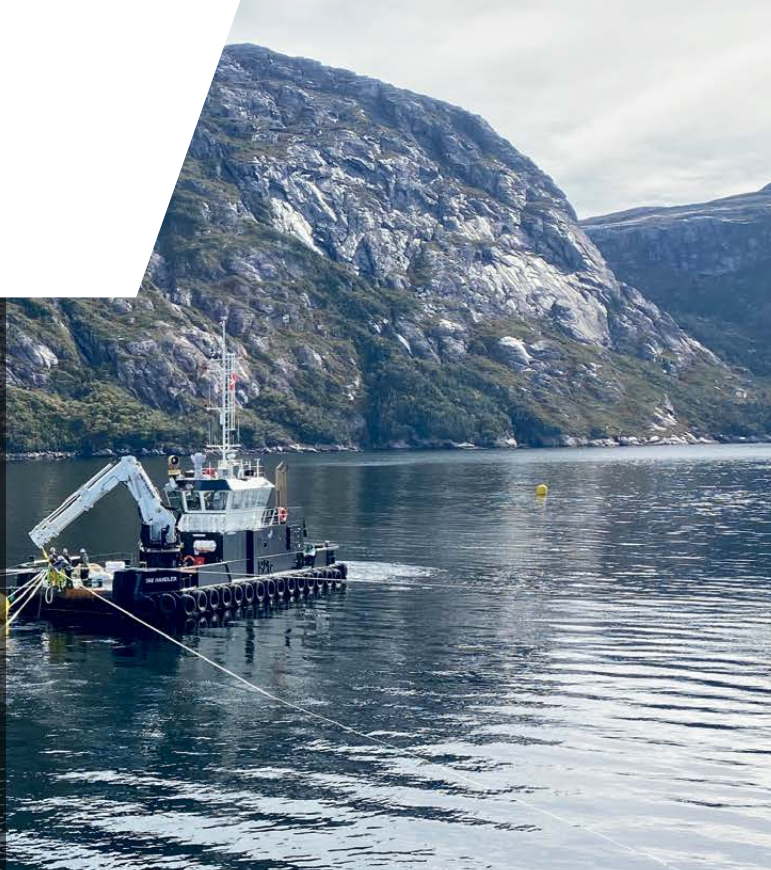
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We want to be there for you through every step of your project. Our vision is to be your go-to destination for all of your needs, whether it's through our wide range of products and services, our highly experienced and professional staff, or our commitment to excellence in everything we do.

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